

jean-françois pambrun

researcher | engineer | software developer

about

(514) 222-2085
8150 fabre
montréal
canada

jf.pambrun@gmail.com
linkedin://jpambrun
github://jpambrun
http://jfpb.net

languages

bilingual french/english

programming

java, javascript
matlab, c, c++
linux, xml, git
html5, latex

standards

dicom, ihe, hl7
jpeg 2000, jpip

education

2011-2016	Ph.D. in electrical engineering <i>improving medical image compression and transmission</i>	École de technologie supérieure (ÉTS)
2009-2010	M.Sc. in electrical engineering (incomplete[†]) <i>evaluation of the diagnostic quality of lossy compressed medical images</i>	École de technologie supérieure (ÉTS)
2005-2009	B.ing. in electrical engineering <i>information technologies and telecommunication</i>	École de technologie supérieure (ÉTS)

experience

jun. 2016-	postdoctoral fellow <i>MR-TRUS fusion and segmentation using deep neural networks</i>	CHUM research centre
sept. 2016-	lecturer <i>procedural programming (inf1005a)</i>	École Polytechnique de Montréal
2009-2014	lecturer <i>software development environment (ele116)</i> <i>image processing and analysis (ele747)</i>	École de technologie supérieure (ÉTS)
2007-2014	teaching assistants <i>healthcare distributed systems (gts840)</i> <i>software development environment (ele116)</i> <i>image processing and analysis (ele747)</i>	École de technologie supérieure (ÉTS)
2009 (01-09)	software developer <i>head-up display simulation for military flight simulators</i>	CAE inc.

awards

2016	GRSTB postdoctoral fellowship	18,000\$
2011	NSERC doctoral Alexander-Graham-Bell scholarship	105,000\$
2011	ÉTS excellence graduate student scholarship	60,000\$
2011	FRQNT doctoral research scholarship	60,000\$
2009	FRQNT master's research scholarship	30,000\$
2006	NSERC undergraduate student research awards	4,500\$

committee and board memberships

2013-2016	board member of an NPO vice-president of services academic commission student representative disciplinary committee student representative	Association étudiante de l'ÉTS
-----------	--	--------------------------------

[†] not a member of the OIQ

[‡] fast-track doctoral admission without obtaining a master's degree

publication

articles in peer-reviewed journals

(Submitted) More Efficient JPEG 2000 Compression for Faster Progressive Medical Image Transfer

Pambrun J.F., Noumeir R.

IEEE Transactions on Image Processing, IEEE, 2016

(Submitted) A Novel Kurtosis-based JPEG 2000 Compression Constraint for Improved Structure Fidelity

Pambrun J.F., Noumeir R.

IEEE Transactions on Image Processing, IEEE, 2016

Computed Tomography Image Compressibility and Limitations of Compression Ratio-Based Guidelines

Pambrun J.F., Noumeir R.

Journal of Digital Imaging, Springer Science, 2015

Teaching DICOM by Problem Solving.

Noumeir R., Pambrun J.F.

Journal of Digital Imaging, Springer Science, 2012

Streaming of medical images using JPEG2000 interactive protocol

Pambrun J.F., Noumeir R.

International Journal of Innovative Computing and Applications, 2012

Using JPEG 2000 Interactive Protocol to Stream a Large Image or a Large Image Set

Noumeir R., Pambrun J.F.

Journal of Digital Imaging, Springer Science, 2010

international peer-reviewed conferences/proceedings

Limitations of the SSIM quality metric in the context of diagnostic imaging

Pambrun J.F., Noumeir R.

IEEE International Conference on Image Processing (ICIP), 2015

Compressibility variations of JPEG2000 compressed computed tomography

Pambrun J.F., Noumeir R.

IEEE International Conference of the Engineering in Medicine and Biology Society (EMBC), 2013

Perceptual quantitative quality assessment of JPEG2000 compressed ct images with various slice thicknesses

Pambrun J.F., Noumeir R.

IEEE International Conference on Multimedia and Expo, 2011

Interoperability testing of integration profiles based on HL7 standard version 3

Pambrun J.F., Noumeir R.

IEEE International Conference on Information Technology and Applications in Biomedicine, 2010

Hands-on Approach for Teaching HL7 version 3

Noumeir R., Pambrun J.F.

IEEE International Conference on Information Technology and Applications in Biomedicine, 2010

Streaming of Medical Images Using JPEG 2000 Interactive Protocol

Noumeir R., Pambrun J.F.

IEEE International Conference on Systems, Signals and Image Processing, 2010

Interoperability Testing Software for Sharing Medical Documents and Images

Berube R., Pambrun J.F., Noumeir R.

IEEE International Conference on Internet and Web Applications and Services, 2010

Images within the Electronic Health Record

Noumeir R., Pambrun J.F.

IEEE International Conference on Image Processing, 2009